

In the Claims

1. (Currently Amended) An automated system that monitors work-in-process (“WIP”) in a manufacturing facility, comprising:
 - a software object that determines when an evaluation cycle should be invoked; and
 - a recommendation wakeup listener object that performs the evaluation cycle, the recommendation wakeup listener object further including:
 - a software object that identifies a bottleneck workstation;
 - a software object that calculates a WIP value representing the amount of work approaching the bottleneck workstation;
 - a software object that determines whether the WIP value is projected to fall below a control limit during an evaluation period; and
 - a software object that recommends, if the WIP value is projected to fall below the control limit during the evaluation period, that a selected amount of additional work be released into [the] a manufacturing line of the manufacturing facility.
2. (Original) The automated system recited in Claim 1, wherein the work approaching the bottleneck workstation comprises one or more product types.
3. (Original) The automated system recited in Claim 1, wherein the additional work comprises one or more product types.
4. (Original) The automated system recited in Claim 1 further comprises:
 - a software object that selects one or more product types for the selected amount of additional work.
5. (Currently Amended) An automated system that controls work-in-process (“WIP”) in a manufacturing facility, comprising:
 - a software object that determines when an evaluation cycle should be invoked; and
 - a recommendation wakeup listener object that performs the evaluation cycle, the recommendation wakeup listener object further including:
 - an object that identifies a plurality of bottleneck workstations;
 - an object that calculates a WIP value for each of the plurality of bottleneck workstations,

wherein each of the WIP values represents the amount of work approaching the corresponding bottleneck workstation ;

an object that determines, for each WIP value, whether the WIP value is projected to fall below a control limit during an evaluation period; and

an object that recommends, if any of the WIP values are projected to fall below the control limit during the evaluation period, that a selected amount of additional work be released into [the] a manufacturing line of the manufacturing facility.

6. (Previously Amended) The automated system recited in Claim 5, wherein the additional work comprises one or more product types.

7. (Previously Amended) The automated system recited in Claim 5, wherein the work approaching the corresponding bottleneck workstation comprises one or more product types.

8 (Currently Amended) A method of controlling work-in-process ("WIP"), comprising:

providing a software object that determines when an evaluation cycle should be invoked;
and

providing a recommendation wakeup listener object that performs the evaluation cycle,
the providing recommendation wakeup listener object further includes:

providing a software object that identifies a bottleneck workstation;

providing a software object that calculates a WIP value representing the amount of work
approaching the bottleneck workstation;

providing a software object that determines whether the WIP value is projected to fall
below a control limit during an evaluation period; and

providing a software object that recommends, if the WIP value is projected to fall below
the control limit during the evaluation period, that a selected amount of additional
work be released into [the] a manufacturing line.

9 (Original) The method recited in Claim 8 further comprises:

providing a software object to select one or more product types for the selected amount
of additional work.

10 (Original) The method recited in Claim 8, wherein:
providing a software object to identify a bottleneck workstation further comprises
employing a software object to identify one or more of a plurality of bottleneck
workstations.

11 (Original) The method recited in Claim 8, wherein :
providing a software object to calculate a WIP value representing the amount of work
approaching the bottleneck workstation further comprises employing a software
object to calculate a WIP value for each of a plurality of bottleneck workstations,
wherein each of the WIP values represents work approaching the corresponding
bottleneck workstation.

12 (Original) The method recited in Claim 8 wherein:
providing a software object to determine whether the WIP value is projected to fall below
a control limit during an evaluation period further comprises employing a
software object to determine whether any of a plurality of WIP values is projected
to fall below the control limit during the evaluation period.

13. (Original) The method recited in Claim 8, wherein:
providing a software object to recommend, if the WIP value is projected to fall below the
control limit during the evaluation period, that a selected amount of additional
work be selected for the bottleneck workstation further comprises employing a
software object to recommend, if the WIP value associated with each of a
plurality of bottleneck workstations is projected to fall below the control limit
during the evaluation period, that a selected amount of additional work be
released into the manufacturing line.

14. (Currently Amended) A method of controlling work-in-process (“WIP”),
comprising:
determining when an evaluation cycle should be invoked; and
performing the evaluation cycle, the performing the evaluation cycle further including:
identifying a bottleneck workstation;
calculating a WIP value representing the amount of work approaching the bottleneck

- workstation; determining whether the WIP value is projected to fall below a control limit during an evaluation period; and recommending, if the WIP value is projected to fall below the control limit during the evaluation period, that a selected amount of additional work be released into [the] a manufacturing line.
15. (Previously Added) The method recited in Claim 14 further comprises: selecting one or more product types for the selected amount of additional work.
16. (Previously Added) The method recited in Claim 14, wherein: identifying a bottleneck workstation further comprises identifying one or more of a plurality of bottleneck workstations.
17. (Previously Added) The method recited in Claim 14, wherein: calculating a WIP value representing the amount of work approaching the bottleneck workstation further comprises calculating a WIP value for each of a plurality of bottleneck workstations, wherein each of the WIP values represents work approaching the corresponding bottleneck workstation.
18. (Previously Added) The method recited in Claim 14 wherein: determining whether the WIP value is projected to fall below a control limit during an evaluation period further comprises determining whether any of a plurality of WIP values is projected to fall below the control limit during the evaluation period.
19. (Previously Added) The method recited in Claim 14, wherein: recommending, if the WIP value is projected to fall below the control limit during the evaluation period, that a selected amount of additional work be selected for the bottleneck workstation further comprises recommending, if the WIP value associated with each of a plurality of bottleneck workstations is projected to fall below the control limit during the evaluation period, that a selected amount of additional work be released into the manufacturing line.

20. (Currently Amended) A manufacturing facility, comprising:
a bottleneck workstation; and
an automated system that monitors work-in-process ("WIP");
wherein the automated system includes:
a software object that determines when an evaluation cycle should be invoked; and
a recommendation wakeup listener object that performs the evaluation cycle, the
recommendation wakeup listener object further including:
a software object that identifies the bottleneck workstation;
a software object that calculates a WIP value representing the amount of work
approaching the bottleneck workstation;
a software object that determines whether the WIP value is projected to fall below a
control limit during an evaluation period; and
a software object that recommends, if the WIP value is projected to fall below the control
limit during the evaluation period, that a selected amount of additional work be
released into [the] a manufacturing line of the manufacturing facility.

21. (Previously Added) The manufacturing facility recited in Claim 20, wherein the
work approaching the bottleneck workstation comprises one or more product types.

22. (Previously Added) The manufacturing facility recited in Claim 20, wherein the
additional work comprises one or more product types.

23. (Previously Added) The manufacturing facility recited in Claim 20, wherein the
automated system further comprises:

a software object that selects one or more product types for the selected amount of
additional work.

24. (Currently Amended) A manufacturing facility, comprising:
a plurality of bottleneck workstations;
a software object that determines when an evaluation cycle should be invoked; and
a recommendation wakeup listener object that performs the evaluation cycle, the
recommendation wakeup listener object further including:
an object that identifies the plurality of bottleneck workstations;

an object that calculates a WIP value for each of the plurality of bottleneck workstations, wherein each of the WIP values represents the amount of work approaching the corresponding bottleneck workstation ;

an object that determines, for each WIP value, whether the WIP value is projected to fall below a control limit during an evaluation period; and

an object that recommends, if any of the WIP values are projected to fall below the control limit during the evaluation period, that a selected amount of additional work be released into [the] a manufacturing line of the manufacturing facility.

25. (Previously Added) The manufacturing facility recited in Claim 24, wherein the additional work comprises one or more product types.

26. (Previously Added) The manufacturing facility recited in Claim 24, wherein the work approaching the corresponding bottleneck workstation comprises one or more product types.
